



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/564,827

05/22/2006

Thomas Huber

59482.21820

3162

30734 7590 10/09/2009
BAKER & HOSTETLER LLP
WASHINGTON SQUARE, SUITE 1100
1050 CONNECTICUT AVE. N.W.
WASHINGTON, DC 20036-5304

EXAMINER

DINH, TIEN QUANG

ART UNIT

PAPER NUMBER

3644

NOTIFICATION DATE

DELIVERY MODE

10/09/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No. 10/564,827	Applicant(s) HUBER ET AL.	
	Examiner Tien Dinh	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3644

Please fix the spelling of “clam” in claim 16. It should read –claim–.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 13, 14-15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin 3612316 in view of Micale 5806797 and/or Powell 20040237439.

Baldwin discloses a floor for a cargo compartment of an aircraft having at least one floor element 18, 14 and functional units 28, 40, 34, 108, which are connected to floor element to carry such units (see figure 2), and floor beam 12 supporting the floor element and adapted to the skin of the aircraft. The floor elements 18, 14 are connected to the floor beam. Baldwin is silent on the prefabricated floor modules. However, Micale discloses that to prefabricate an aircraft structure is well known. The prefabricated structures are then used to build the fuselage. See figure 16. In addition, Powell discloses that to prefabricate a structure is well known.

It would have been obvious to one skilled in the art at the time the invention was made to have made prefabricated floor modules in Baldwin's system as taught by Micale and/or Powell so that the floor system for an aircraft can be assembled and disassembled quickly.

Re claim 3, Baldwin discloses at least one of an electrical control device and mechanical control device for controlling the functional unit is connected to the functional unit. See figure 6. See column 3, lines 21-41.

Art Unit: 3644

Re claim 13, people can walk on the floor panels shown in figure 1 of Baldwin.

Re claims 14 and 15, the insulation devices are not numbered but are clearly shown in figure 1 of Baldwin. These devices connect the fuselage to the floor modules. There are the two vertical insulation elements connected between the fuselage and the floor modules.

Re claim 20, the examiner takes official notice that lining element and a mounting device for the lining elements are well known and that one skilled in the art would have used such elements and devices so as to protect the interior of Baldwin.

Re claim 21, the floor modules can be fastened to the skin and removed again in an arbitrary sequence as taught by the prior arts above.

Claims 4-7, 12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Owen 6061982.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the floor modules having channels to hold electrical leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module to form an overall conducting system when the floor modules are attached to each other. However, Owen teaches that floor modules having power cables or electrical leads/wires 20, 26 and water conduits or drainage devices 14, 15 that run across multiple floor modules and forming an overall conducting system are well known. See figure 1.

It would have been obvious to one skilled in the art at the time the invention was made to have used floor modules and made the modules of Baldwin have the capability to carry electrical

Art Unit: 3644

leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module as taught by Owen to have a floor module system that run the whole fuselage so that the aircraft can carry more payloads and to quickly assemble and disassemble the floor modules from the fuselage.

Re claim 4, the examiner takes official notice that transmission sockets are well known in this day and age. It would have been obvious to one skilled in the art at the time the invention was made to have use power transmission sockets in Baldwin's system so that the transmission of power can run across the floor modules for easier assembly and disassembly.

Re claims 6 and 7, the branches are shown in figure 1 of Owen. See parts 20, 26. Re claim 7, see parts 70, 72, which are the mechanical connections. See figure 6 of Owen. It would have been obvious to one skilled in the art at the time the invention was made to have used braches and mechanical connections in Baldwin's system as taught by Owen to allow floor modules to be connected mechanically and electrically.

Re claim 18, Owen discloses floor modules having a connecting device (which is the outer covering of the wires 20 shown in figure 1) for electronic components. The fixation device can be parts 18 or 42, 50.

Re claim 19, Baldwin is silent on the water tanks and the connecting devices. Please note that Owen teaches water tanks 86 and a connecting device 14, 15 are well known. It would have been obvious to one skilled in the art to have used water tanks and/or connecting devices 14 in Baldwin's system as taught by Owen to move liquid through the floor modules.

Art Unit: 3644

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Telair International DE19712278.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the inspection openings with floor element section and the fast action closure device. However, Telair discloses that inspection openings with floor element sections 42 and fast action closure devices (not numbered but is next to number 59 in figure 1) are well known. The bilge space is disclosed by Baldwin.

It would have been obvious to one skilled in the art at the time the invention was made to have used inspection openings with fast action closure devices in Baldwin's system as taught by Telair to allow easy access through the floor modules for safety inspections.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Tovani 5827022.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the sealing device or leakproof connecting elements. However, Tovani discloses that sealing devices are well known. See figure 1 and where number 22 is pointed to.

It would have been obvious to one skilled in the art at the time the invention was made to have used sealing devices Baldwin's system as taught by Tovani to have a tighter seal over and below the floor elements and between floor elements.

Art Unit: 3644

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Nordstrom 7410128.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the bulkheads and fixation devices. However, Nordstrom discloses that Bulkheads 48 with fixation devices are well known. See figure 2.

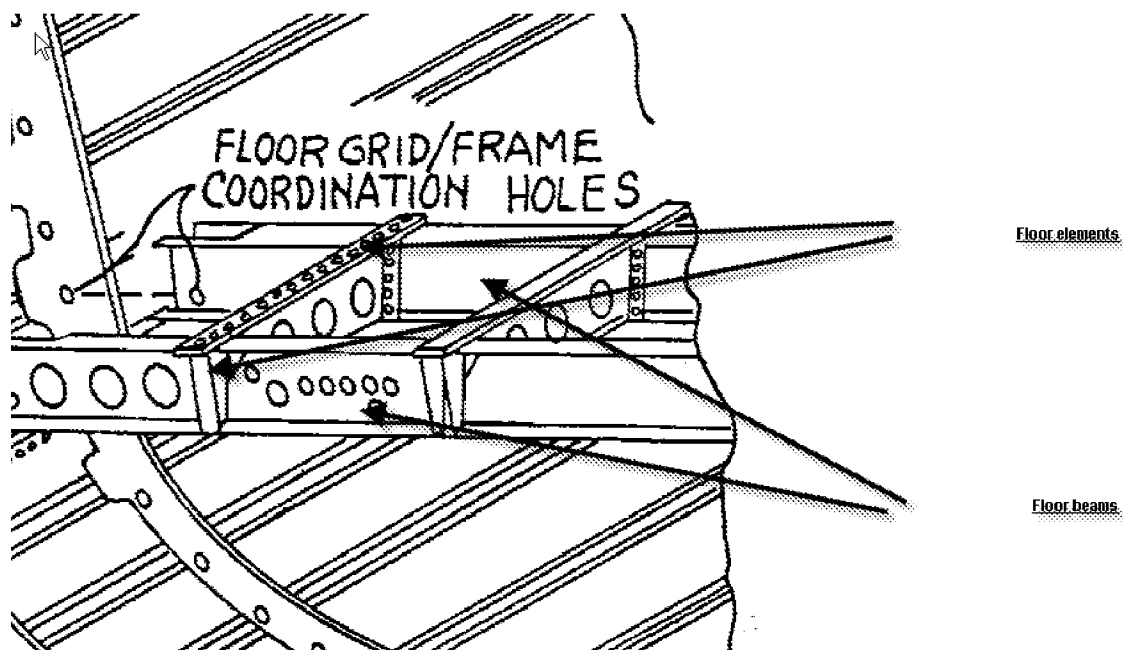
It would have been obvious to one skilled in the art at the time the invention was made to have used bulkheads and fixation devices in Baldwin's system as taught by Nordstrom as separation barriers for better organization. Please note that the bulkhead has ballistic resistant materials since it can resist ballistic parts.

Response to Arguments

Applicant's arguments filed 6/16/09 have been fully considered but they are not persuasive. In response to applicant's argument that Powell is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Powell clearly teaches that to have made a structure to be a prefabricated structure is well known in the art. Clearly, a person skilled in the art would have made the floor of Baldwin into a prefabricated structure to assemble and disassemble the floor structure from the aircraft. The mere fact that Powell is classified in class 52 does not render it non-analogous art.

Art Unit: 3644

Applicant has also argued that figures 16-18 of Micale teaches away from the claimed invention because the floor grids are assembled to the fuselage before any floor elements are connected to the floor grids. The examiner disagrees with applicant's interpretation. It is quite clear that Micale teaches prefabrications are well known. Specifically, the prefabricated floor beam support with at least one floor element. See the figure below. Plus, even the segment that contains the coordination holes can be interpreted as floor elements being supported by the beams.



In summary pertaining to the rejection with Baldwin in view of Micale and/or Powell, the Baldwin reference teaches all claimed parts except for the prefabrication. However, prefabrications or fabrication steps are well known in this day and age. A pre-fabrication as taught by Micale and/or Powell would clearly lead one skilled in the art to have used prefabrications in Baldwin's system to easily assemble the aircraft.

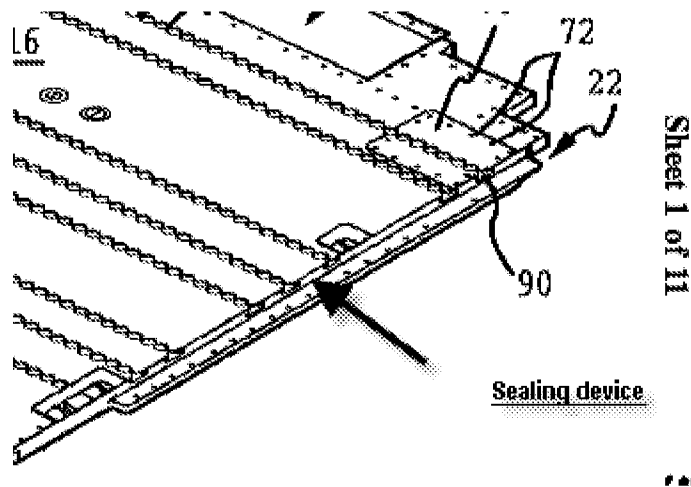
Art Unit: 3644

In response to applicant's argument that Owen is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Owen clearly teaches floor modules with cables, wires, etc that run across multiple floor modules and forming an overall conducting systems are well known. A person skilled in the art would have made the modules of Baldwin be capable of supporting support devices in the floor modules so that floor module system can run the whole fuselage. Plus, since applicant has not challenged the official notice of claim 4, this is now admitted prior art. As for the argument about claim 19, please note that applicant claimed "at least one of". In this case, at least one of a "connecting device" is clearly taught by Owen.

As for the arguments about Telair in the rejection of claims 8 and 9, applicant does seem to have argued much here. Applicant merely states that "Telair does not comprise such a teaching" and cited column 3, lines 36-39 and 55-59. Nevertheless, Telair does teach inspection openings with a floor element section 42 and fast action closure devices. See also figure 4.

As for the Tovani reference, applicant argues that since Tovani does not use the word "seal" or "airtight" that this reference is disqualified. Please note that applicant did not claim "airtight". Tovani does disclose a sealing device which is adapted or capable of creating a tight seal. See the figure below. This is similar to applicant's "seal" 44, 43.

Art Unit: 3644



As for the argument on claim 16, Nordstrom teaches that bulkheads 48 with fixation devices are well known. A person skilled in the art would have used bulkheads with fixation devices in Baldwin's system. Plus, since Baldwin's system is prefabricated as modified by Micale and/or Powell, it would have been obvious to one skilled in the art to have made the bulkheads with fixation devices be part of the prefabricated floor.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3644

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 12-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on 571-272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D./

Primary Examiner, Art Unit 3644